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EXAMINER

TRUONG, LECHI

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,390

Applicant(s)

TIM WILINSION

Examiner

LeChi Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 26, 30, 33, 36, 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
2. As to claims 26, 30, 33, 36, 37, the term “converting the platform independent code using an operating abstraction interface” is not described in the specification”.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 10-13, 23, 24, 26, 27, 28, 30, 31-40, 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solomon (US. Patent 6,269,409 B1) in view of Chernyak et al (US. Patent 6,480,891 B1) and further in view of Weisshaar et al 6,580,916 B1)
4. As to claim 1, Solomon teaches the invention substantially as claimed including: an operating system (multiple operating system, col 3, ln 43-60/ Fig. 3), layer (layer, col 3, ln 43-

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60), a first operating system (Window NT OS, col 3, ln 43-60/ Fig. 3), an operation system abstraction layer (software abstraction layer 320, col 3, ln 53-60/ Fig. 3/ col 4, ln 40-55), interface (interface, col 3, ln 53-60), platform dependent code (platform dependent code, col 4, ln 25-32), platform independent code(operating system 306, col 3, ln 44-50/ Fig. 3), programming environment(virtual machine system, col 1, ln 15-20).

5. Solomon does not teach a client software program, embedded computing device.

However, Chernyak teaches a client software program, embedded computing device. (ATM embedded device, LMA device, col 3, and ln 5-20).

6. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Solomon and Chernyak because Chernyak's ATM embedded device, LMA device would convert configuration data from one version to another such as after a software upgrade.

7. Solomon and Chernyak do not teaches application framework. However, Weisshaar teaches application framework (service framework, col 8, ln 44-45/ col 14, ln 5-20).

8. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Solomon, Chernyak and Weisshaar because Weisshaar's framework would provide as standard, simple way for services to make themselves available and for service using entities to locate the services that they are interested in.

9. **As to claim 2**, Solomon teaches second platform dependent code to a second operation system (col 2, ln 5-8).

10. **As to claim 3**, Solomon teaches the first/ second platform is installed on the embedded computing device (a windows NT device, col 6, ln 25-30).

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11. As to claim 4, Solomon teaches the first processor/ second processor, exchanging the first processor with a second processor (multiprocessor communication, col 4, ln 20-25).

12. As to claim 5, Solomon teaches abstraction layer is configured to interface between platform independent code and second platform dependent code (col 3, ln 55-60/ col 5, ln 5-8).

13. As to claim 6, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Chernyak teaches a client support server (software server 24, col 5, ln 1-15, col 3, ln 5-10/ col 6, ln 64-68), a type converter module for translating complex content to simplified content (code portion 64, one of which is shown that functions to convert device configuration data from an outdated version to current version, col 7, ln 1-3/ ln 22-27), the client software program is configured to receive the simplified content from the client support server for processing the simplified content(col 5, ln 12-20/ col 7, ln 21-30).

14. As to claims 10, 11, they are apparatus claim of claims 8, 9; therefore, it is rejected for the same reason as claims 8, 9 above.

15. As to claim 12, Solomon teaches an operating system abstraction layer (software abstraction layer 320, col 3, ln 53-60/ Fig. 3/ col 4, ln 40-55), platform independent code (operating system 306, col 3, ln 44-50/ Fig. 3), platform dependent code (platform dependent code, col 4, ln 25-32), abstraction layer is configured to interface between platform independent code and second platform dependent code (col 3, ln 55-60/ col 5, ln 5-8).

16. As to claim 13, it is an apparatus claim of claim 2; therefore, it is rejected for the same reason as claim 2 above.

17. As to claim 23, it is an apparatus claim of claim 6; therefore, it is rejected for the same reason as claim 6 above.

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18. As to claim 24, Chernyak teaches simplified content translated from the complex content (col 7, ln 1-5/ ln 21-27).

19. As to claim 26, Solomon teaches a programming environment using platform independent code (a UNIX operating system, col 7, ln 25-37), converting (translation, col 7, ln 25-37), an operating abstraction interface (the software abstraction layer, col 7, ln 25-37), operating system running platform dependent code (the Windows NT operating system, col 7, ln 25-37).

20. As to claims 27, 28, 30, they are apparatus claims of claims 23, 24, 26; therefore, they are rejected for the same reasons as claims 23, 24, 26 above.

21. As to claim 31, it is an apparatus claim of claim 23; therefore, it is rejected for the same reasons as claim 23 above. In additional, Weisshaar teaches the package repository (the server-based remote service backend, col 20, ln 31-45/ Fig. 7).

22. As to claim 32, Weisshaar teaches a feature request to the repository, transferring the package metadata from the package repository to the client (col 20, ln 39-45).

23. As to claim 33, it is an apparatus claim of claim 30; therefore, it is rejected for the same reason as claim 30 above.

24. As to claim 34-36, 37, they are apparatus claims of claim 31-33; therefore, they are rejected for the same reason as claim 33 above.

25. As to claim 38, it is an apparatus claim of claim 31; therefore, it is rejected for the same reasons as claim 31 above. In additional, Weisshaar teaches a package manager (a remote lookup daemon 260, col 17, ln 25-29/ Fig. 7).

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26. As to claim 39, 40, 42, they are apparatus claims of claims 28, 32, 38; therefore, they are rejected for the same reasons as claim 39, 40, 38.

27. As to claim 43, 44, 45, they are apparatus claim of claims 27, 28; therefore, it is rejected for the same reasons as claims 27, 28 above.

28. Claims 7-9, 25, 29, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solomon (US. Patent 6,269,409 B1) in view of Chernyak et al (US. Patent 6,480,891 B1) Weisshaar et al (6,580,916 B1) and further in view of Ortega et al (US 6,711,162 B1).

29. As to claim 7, Solomon, Chernyak and Weisshaar do not teaches a protocol converter module for mapping at least one complex protocol to a simple protocol. However, Ortega teaches a protocol converter module for mapping at least one complex protocol to a simple protocol (a packet translation module that converts packets from a first form to a second protocol form, col 3, ln 55-58).

30. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Solomon, Chernyak, Weisshaar and Ortega because Ortega's a packet translation module that converts packets from a first form to a second protocol form would allows the host computer to set up logical connections with the service endpoint using protocol.

31. As to claim 8, Weisshaar teaches a package manager (a remote lookup daemon 260, col 17, ln 25-29/ Fig. 7), a package repository (the server-based remote service backend, col 20, ln 31-45/ Fig. 7).

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32. As to **claim 9**, Weisshaar teaches a package registry (a service registry, col 14, ln 6-10/ the service event notification registry 254, col 16, ln 40-61), compare the package registry with package data need to run the software package (col 16,ln 55-61).

33. As to **claim 25, 29, 41**, they are apparatus claim of claim 7; therefore, they are rejected for the same reasons as claim 7 above.

34. **Claims 14-16, 19, 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisshaar et al (US. Patent 6,580,916 B1) in view of Chernyak et al (US. Patent 6,480,891 B1) and further in view of Ortega et al (US 6,711,162 B1).

35. As to **claim 14**, Weisshaar teaches an operating system layer (the lowest layer, col 7,ln 45-49), a first operating system (a real-time operating system 208, col 7, ln 45-49), a programming environment (col 7, ln 37-45), an application framework (service framework, col 8, ln 44-45/ col 14, ln 5-20), client software program (client platform, col 7, ln 15-20), a client support server (server platform, col 9, ln 23-33).

36. Weisshaar do not explicit teach embedded computing device. However, Chernyak teaches embedded computing device (ATM embedded device, LMA device, col 3, ln 5-20).

37. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Weisshaar and Chernyak because Chernyak's ATM embedded device, LMA device would convert configuration data from one version to another such as after a software upgrade.

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38. Weisshaar, Chernyak do not teaches a protocol converter module for mapping at least one complex protocol to a simple protocol. However, Orterga teaches a protocol converter module for mapping at least one complex protocol to a simple protocol (a packet translation module that converts packets from a first form to a second protocol form, col 3, ln 55-58).

39. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Weisshaar, Chernyak and Orterga because Orterga's a packet translation module that converts packets from a first form to a second protocol form would allows the host computer to set up logical connections with the service endpoint using protocol.

40. **As to claim 15**, Weisshaar teaches a package manager (a remote lookup daemon 260, col 17,ln 25-29/ Fig. 7), a package repository (the server-based remote service backend, col 20, ln 31-45/ Fig. 7).

41. **As to claim 16**, Weisshaar teaches a package registry (a service registry, col 14, ln 6-10/ the service event notification registry 254, col 16, ln 40-61), compare the package registry with package data need to run the software package (col 16,ln 55-61).

42. **As to claims 19, 20**, they are apparatus claims of claims 14, 15, 16; therefore they are rejected for the same reasons as claims 14, 15, 16 above.

43. Claims **17, 18, 21, 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisshaar et al (US. Patent 6,580,916 B1) in view of Chernyak et al (US. Patent 6,480,891 B1) in view of Ortega et al (US 6,711,162 B1) and further in view of Solomon (US. Patent 6,269, 409 B1).

44. **As to claim 17**, Weisshaar, Chernyak and Ortega do not teach abstraction layer, first platform dependent code used by first operating system, the platform independent code.

However, Solomon teaches a first operating system (Window NT OS, col 3, ln 43-60/ Fig. 3), an operation system abstraction layer (software abstraction layer 320, col 3, ln 53-60/ Fig. 3/ col 4, ln 40-55), interface (interface, col 3, ln 53-60), platform dependent code (platform dependent code, col 4, ln 25-32), platform independent code (operating system 306, col 3, ln 44-50/ Fig. 3).

45. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Weisshaar, Chernyak, Ortega and Solomon because Solomon's software abstraction layer, platform dependent code, operating system 306 would improve the method for concurrently executing multiple operating system.

46. **As to claim 18**, Solomon teaches second platform dependent code to a second operation system (col 2, ln 5-8).

47. **As to claim 21, 22**, they are apparatus claims of claims 17, 18; therefore, they are rejected for the same reasons as claims 17, 18 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

June 9, 2004



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